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Ethyl Petroleum Additives, Inc.  
501 Monsanto Avenue  
Sauget, Illinois 62201  
TEL: 618-583-1000

**RECEIVED**  
JUN 18 1997

June 13, 1997

**SUPERFUND PROGRAM  
MANAGEMENT BRANCH**

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JUN 18 1997  
**SUPERFUND PROGRAM  
MANAGEMENT BRANCH**

Mr. Carlton D. Cuffman  
United States Environmental Protection Agency  
Region V  
77 W. Jackson Blvd. - SM-5J  
Chicago, IL 60604-3590

Re: Response of Ethyl Petroleum Additives, Inc., to EPA's Request for Information  
Pursuant to CERCLA 104(e) for Sauget Areas I and II, Sauget/Cahokia, Illinois.

Dear Mr. Cuffman:

Attached as Exhibit A is Ethyl Petroleum Additives, Inc.'s response to EPA's May 13, 1997 information request regarding Sauget Areas I and II.

Attached as Exhibit B is the affidavit of Jonathan A. Jacoby who supervised Ethyl's efforts to interview current and past employees and gather documents to make its response.

Documents will be sent to you by overnight mail. Please note that certain documents are confidential.

Please contact Jonathan A. Jacoby at (618) 583-1000 if you have questions regarding this information.

Sincerely,  
ETHYL PETROLEUM ADDITIVES, INC.

BY: 

SUNIL B. SENGUPTA  
Plant Manager

Enclosures  
cc: Jonathan A. Jacoby

**EXHIBIT A**

**RESPONSE OF ETHYL PETROLEUM ADDITIVES, INC.,  
TO EPA'S REQUEST FOR INFORMATION PURSUANT  
TO CERCLA §104(E) FOR SAUGET AREAS I AND II,  
SAUGET/CAHOKIA, ILLINOIS**

To prepare this response, current and former employees of Ethyl were interviewed. Available documents at Ethyl's Sauget facility and Richmond, Virginia headquarters were reviewed. Ethyl's ability to consult historical documents was limited since a document storage area at its Sauget facility was flooded in 1993, destroying whatever documents, if any, that may have existed responsive to EPA's request.

For your convenience, EPA's questions have been retyped followed by Ethyl's response in bold type.

1. Identify all persons consulted in the preparation of the answers to this Information Request.

**Jonathan A. Jacoby  
Manager of Environmental Safety and Regulatory Affairs  
Ethyl Petroleum Additives, Inc.  
501 Monsanto Avenue  
Sauget, IL 62201  
(618) 583-1000**

**Sunil B. Sengupta  
Plant Manager  
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**Donna K. Parks  
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**Edward M. Cox  
Environmental Advisor  
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(618) 583-1000**

**Harold F. Mason  
Maintenance Manager  
Ethyl Petroleum Additives, Inc.  
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(618) 583-1000**

Kevin J. Steding  
Manager of Quality & Logistics  
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Richard C. Rutherford  
Safety Supervisor  
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Robert J. Riggle  
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Len Knipp  
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Darwin E. Lewis  
3235 Bainburry Court  
St. Louis, MO 63129  
(314) 892-5252  
(Retired from Ethyl in 1994)

W.A. Koenig  
610 N. Harrison Street  
Trenton, IL 62293  
(618) 224-9194  
(Retired from Ethyl in 1994)

**Mike Bonaventure**  
**Senior Advisor Environmental Affairs**  
**Albemarle Corporation**  
**451 Florida Street**  
**Baton Rouge, LA 70801**  
**(504) 388-7740**  
**(Employed at Ethyl's Sauget facility 1985-1991)**

**Don Park**  
**Environmental Director**  
**Albemarle Corporation**  
**451 Florida Street**  
**Baton Rouge, LA 70801**  
**(504) 388-7575**  
**(Environmental Director at Ethyl until 1994)**

**Christa Andrews**  
**Advance Environmental Associates**  
**2088 Craigshire Drive**  
**St. Louis, MO 63146**  
**(314) 434-5700**  
**(Ethyl employee 1985-1989)**

**Jim Sparks**  
**Rineco Chemical Industries**  
**413 N. 4th Street**  
**Dupo, IL 62239**  
**(618) 286-3191**  
**(Ethyl employee 1971-1985)**

**D. Jack Coon**  
**7637 Oakleaf Drive**  
**Santa Rosa, CA 95409**  
**(707) 538-1518**  
**(Retired from Ethyl in 1986)**

**B.W. Corlew**  
**308 East Bodley**  
**Kirkwood, MO 63122**  
**(Retired from Ethyl in 1981)**

2. Identify all documents consulted, examined, or referred to in the preparation of the answers to this Request, and provide copies of all such documents, clearly indicating on each document the questions to which it is responsive.

**The documents responsive to EPA's information request will be submitted under separate cover.**

3. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide

additional responsive documents, identify such persons and where they can be contacted.

Unknown employees of former owners of the facility; unknown employees of former waste haulers and landfill operators; Mike Maney (spelling uncertain), Russel Bliss, Harold Waggoner and Paul Sauget. The location of Mike Maney is unknown. The last known addresses of the other haulers and operators are contained in the report submitted to Congressman Eckhardt, at Tab 16.

4. List the EPA Identification Numbers for the facility.

EPA ILD05587130

IEPA 1631210013

5. Identify all persons having knowledge or information about the generation, transportation, treatment, disposal or other handling of hazardous substances at Sauget Area Sites or at the facility during the time period specified in the instructions.

Since the Sauget Sites were never owned by Ethyl, Ethyl is unfamiliar with the practices at the Sauget Area Sites to manage hazardous substances.

The following individuals are knowledgeable about the management of hazardous wastes for the facility during the relevant time period:

Jonathan A. Jacoby  
W.A. Koenig  
Harold F. Mason  
Richard C. Rutherford  
Jim Sparks  
Bill Williams  
Mike Bonaventure

6. Identify the acts or omissions of any person, including employees, contractors, or agents, that caused or may have caused the release or threat of release of hazardous materials from the facility, as well as, any damages resulting therefrom.

In the late 1970s or early 1980s, a 5,000 gallon release of benzene occurred. A vacuum truck belonging to Able Sewers was used to recapture as much of the liquid as possible, which was later sold for fuel. The area was sanded and scraped with a bulldozer. No damages are believed to have occurred from this event.

In late 1973 or early 1974, off-specification, highly viscous calcium sulfonate was spilled by Waggoner and Company onto the street in front of the facility. Not all

off-specification calcium sulfonate was hazardous and it is not known whether this particular material would have been considered hazardous. The dome on the truck container was not tight and the material splashed out when a corner was turned too sharply. It is believed that the material was sanded down, scraped-up and sent to a landfill. No damages are believed to have occurred from this event.

While cleaning a tank in 1983, sulfur dichloride reacted with a water/sodium hydroxide solution admitting a brownish yellow plume. Some individuals were treated for eye irritation, breathing difficulties and nausea. Thirteen persons were admitted and kept overnight for observation at St. Mary's Hospital in East St. Louis, Illinois. Government officials investigated the release.

During Monsanto's ownership of the facility, it is believed that Monsanto manufactured "agent orange," which contained small amounts of dioxin. Soil samples taken at the site indicated the presence of 2,3,7,8-tetrachlorodibenzoparadioxin (2,3,7,8-TCDD). On May 17, 1983 EPA issued an administrative order requiring a remedial investigation and groundwater sampling. An October 15, 1986, report submitted to EPA concluded that no dioxin contamination existed in the groundwater beneath the site. Ethyl has agreed to contain the dioxin soil on-site and to take soil samples when construction in specified areas will disturb the soil at the facility. No damages are believed to have occurred by virtue of the presence of dioxin. For additional information about the dioxin contamination at the site, see the documents at Tab 6.

7. Identify all persons, including yourself, who have arranged or may have arranged for disposal, treatment, discharge, release, or arranged for transportation for disposal or treatment, of hazardous materials at or to any Sauget Area Site, with particular attention to persons who performed these duties. For each arrangement for disposal, treatment, storage, release, or transportation for disposal, treatment or release, identify the following:

To its knowledge, the facility did not dispose, arrange for, release, treat or otherwise send hazardous waste to the Sauget Area Sites.

The facility did not send liquid waste to landfills. Liquid hazardous waste was sent for fuel blending or energy recovery.

During the relevant time period, no filter cake produced at the facility was considered a RCRA hazardous waste. Sometime after the enactment of RCRA, barium filter cake was determined to be a D005 hazardous waste. It is believed

that the change became effective after 1985 and henceforth it was managed accordingly.

The method to dispose of non-hazardous filter cake is described in the response to question 10.

- a. The persons with whom you or such other person(s) made such arrangements, including all transporters used;

Not applicable.

- b. Each date on which such arrangements took place;

Not applicable.

- c. For each transaction, the nature of the material, including the chemical content, characteristics, physical state (e.g., solid, liquid), and the process for which the material was used or the process which generated the material;

Not applicable.

- d. The owner of the materials so accepted or transported;

Not applicable.

- e. The quantity of the materials involved (weight or volume) in each transaction and the total quantity for all transactions;

Not applicable.

- f. All tests, analyses, and analytical results concerning the materials;

Not applicable.

- g. The person(s) who selected the Site as the place to which the materials were to be transported;

Not applicable.

- h. The amount paid in connection with each transaction for transport or disposal, method of payment, and identity of the person from whom payment was received;

Not applicable.



- i. Whether the person(s) identified in g., above, intended to have such materials transported and all evidence of this intent;

**Not applicable.**

- j. Whether the materials involved in each transaction were transshipped through, or were stored or held at, any intermediate site prior to final treatment or disposal;

**Not applicable.**

- k. What was actually done to the materials once they were brought to the Site;

**Not applicable.**

- l. The measures taken by you to determine the actual methods, means, and site of treatment or disposal of the materials involved in each transaction;

**Not applicable.**

- n. The type and number of containers in which the materials were contained when they were accepted for transport, and subsequently until they were deposited at the Site, and all markings on such containers;

**Not applicable.**

- o. Copies of all documents containing information responsive to a. - n. above;

**Not applicable.**

8. Provide a detailed listing of products, including by-products, manufactured or produced at the facility.

**The Sauget facility has mainly produced crankcase, gear and hydraulic lubricant additives. The major functional additive types are detergents, dispersants, viscosity index improvers, antioxidants, rust and corrosion inhibitors, extreme pressure agents, antiwear agents, and pour point depressants.**

**In general, the facility produces alkylbenzene, alkylbenzene sulfonic acid, neutral sulfonates, zinc dialkyl dithiophosphates, nonyl phenol sulfide, overbased calcium sulfonate, barium sulfonate, phosphonated terpene, ashless dispersant, thiodiazoles, sulfurized isobutylene, intermediates and blends.**

Submitted in a sealed envelope at Tab 8 and stamped as "privileged and confidential" is information submitted to the TSCA Chemical Substance Inventory about Ethyl's products. This information is highly proprietary. Ethyl's competitive position would be irreparably harmed if a competitor were able to find out the volumes and nature of its products. Therefore, this material and information is to remain permanently protected pursuant to CERCLA § 104(e)(7) and 40 CFR Part 2. A separate sheet accompanies the protected information wherein the claim of confidentiality is asserted in accordance with the requirements of 40 CFR Part 2.

During Monsanto's ownership of the facility and for a short time thereafter, specialty chemicals were also produced at the facility. Monsanto took all files and documents related to these products with it.

9. Describe the manufacturing and recycling processes at the facility.

Ethyl's processes involve the chemical reaction or blending of raw materials to make the products identified in question 8. The processes also include using diatomaceous earth for filtration. The process of disposing of diatomaceous earth-filter cake is described in Ethyl's response to question 11.

Ethyl's activities to recycle laboratory samples and off-specification products are described in its responses to questions 13 and 15.

In the 1970s, the facility started a program to recycle materials taken from the facility. Materials were not to be dumped and were to be handled in accordance with the requirements of EPA and the States of Illinois and Missouri. See agreement at Tab 9.

10. Specifically, identify which of the following chemicals or chemical trade names were ever used or purchased, produced or stored at the facility? (See Attachment 7, photo numbers 40, 65, 66, & 72).

a. Zinc oxide, lead free

Yes. Used as a raw material.

b. Ammonium Nitrate

Not to the knowledge of Ethyl.

c. Garlock 900

Ethyl used Garlock gaskets at its facility. However, it is unknown whether these gaskets were Garlock 900.

d. Calcium Chloride

**Yes. Used as a raw material.**

e. Octyphenol

**Not to the knowledge of Ethyl.**

f. Sodium sulfate

**Not to the knowledge of Ethyl.**

g. Nalco

**Ethyl used a Nalco fiber product to plug holes in filter screens.**

h. Dicalite

**Yes. Used as a product filter aid.**

11. For the chemical/chemical trade names specified in Question 10 which the facility used, purchased, produced, or stored, identify:

a. For what purpose it was used, purchased, produced, or stored; and

**See the responses to question 10.**

b. Where and what was the manner of its disposition.

**Nalco - After a time, filter screens become worn and are disposed of as trash or sent to steel mills for metal recycling.**

**Dicalite is a brand name for diatomaceous earth. It is used by Ethyl in its processes to filter products. The products produced from the raw materials identified in question 10 would be filtered through the diatomaceous earth. Residuals of the components will combine with the diatomaceous earth to form "filter cake," which has the appearance of damp soil.**

**Filter cake is solid waste, except for the barium filter cake Ethyl now produces which was described in the response to question 7.**

**In the 1970s, Mike Maney would pick up Edwin Cooper/Ethyl's filter cake once or twice daily in roll off boxes. He would take the filter cake to the Sauget Sanitary Landfill, owned by Sauget & Company. See agreements with Sauget & Company included in the response to question 16.**

At some point, date unknown, filter cake was taken to the Bi-State Landfill and the Milam Landfill. Ethyl retained BFI and later Waste Management to transport and dispose of filter cake. The dates of these contracts are unknown.

12. During U.S. EPA's removal action at Sauget Area I site G (see Attachment 3), the catalytic agents pictured in Attachment 7, photo numbers 11, 30, 31, 38, 46, 47, 58, 63, & 64, were found buried on site.

Ethyl does not recognize the catalytic agents pictured in the photographs.

- a. Were such agents ever used at the facility? If so,

Not applicable.

- b. For what purpose were they used; and

Not applicable.

- c. What and where was their disposition?

Not applicable.

13. Provide information and documents concerning the facility's treatment and disposal practices and policies concerning off-specification products.

The facility attempted to rework off-specification materials. For example, if the product was off-specification because it did not have enough of a component, an additional amount of the component would be added to meet product specifications.

If the off-specification products could not be reworked, a program was started in the 1970s to send the materials to an incinerator or to use them for fuel blending for energy recovery.

The most common off-specification product came from the calcium sulfonate process. Sometimes this material could not be reworked. Ethyl employees remember Mike Maney and Harold Waggoner transporting off-specification, highly viscous calcium sulfonate. However, Ethyl has no documents to confirm these recollections.

The facility had an agreement with Bliss Waste Oil Service to recycle the materials Bliss removed from the facility in accordance with the applicable government requirements. These materials were not to be dumped. See agreement at Tab 9.

14. As the facility operations changed, describe past practices used to dispose of obsolete process equipment.

After it was cleaned and dismantled, if necessary, obsolete process equipment was either scrapped or sent to a used equipment dealer for resale. Ethyl normally used East St. Louis Equipment or Hayden Wrecking Corporation for these purposes.

Information relating to taking certain PCB transformers out of service is contained in the response to question 22.

15. Describe the methods used to handle and dispose of contaminated soil, contaminated clothing/protective gear, and laboratory equipment or laboratory wastes at or from the facility. Were these items co-mingled with other hazardous or non-hazardous materials before disposal?

Dioxin contaminated soil has been retained on-site. See the response to question 6 for additional information. Dioxin contaminated soil is not co-mingled with any other material.

Contaminated soil from the spills described in response to question 6 is believed to have been sent to landfills.

During operations, it is not believed that clothing or protective gear were contaminated.

Laboratory equipment was emptied and cleaned and reused where possible. When necessary, it was disposed of as trash.

Laboratory samples were returned to the processes from which they came.

16. Did the facility or any of its consultants, agents, or contractors at any time secure the services of Leo Sauget or his company (later named "Industrial Salvage & Disposal, Inc."), Paul Sauget or Sauget & Company, Harold Waggoner or Waggoner and Company, to process, accumulate, treat, remove, haul or dispose of any hazardous materials and/or solid waste which the facility generated or which was used at the facility? If so, identify the companies, consultants, agents or contractors, describe the nature of these services, when they were rendered, and all contracts or agreements associated with these services. In particular, describe the arrangement with this company regarding where these materials and/or solid waste were to be disposed of.

Edwin Cooper had two contracts it has located with Sauget & Company for the disposal of refuse in Sauget & Company's Sanitary Landfill. Copies of the two contracts are at Tab 16. The contracts describe the landfill as property leased from Union Electric Company, North of Monsanto Avenue and East of the Corps of Engineers Levee between the GM & O Terminal RR Track. A report submitted to Congressman Eckhardt in 1979 indicates that the facility used the services of Sauget and Company.

Ethyl is aware of one incident described more fully in question 6 where Harold Waggoner transported off-specification, highly viscous calcium sulfonate from the facility. The report submitted to Congressman Eckhardt indicates that the facility used the services of Harold Waggoner & Company for one year.

The information submitted to Congressman Eckhardt about the facility is at Tab 16.

17. Describe how the percentage of the cost responsibility was assigned to the parties participating in the 1987 clean-up of the Sauget Treatment Plant lagoons and ponds. Provide all information and documents in your possession relating to or concerning the percentage contribution of waste-water sent to the Sauget POTW by Sauget Industries.

The response to this question is submitted in a sealed envelope at Tab 17. The parties agreed that information regarding the settlement was confidential.

18. Did the facility and/or other industries ever, intentionally or accidentally, spill or discharge process wastewater, sanitary discharges, liquid chemical wastes and/or petroleum products into Dead Creek? Describe these spills or discharges.

Not to the knowledge of Ethyl.

19. Describe, in detail, the methods used at the facility for handling process wastewater and sanitary discharges prior to the facility's hook up to the Village of Sauget's (then the Village of Monsanto's) process water sewer interceptor system. Also, identify when the facility did hook up to this system.

To the best of our knowledge, the facility has always been connected to the Village sewer system. The facility was connected to the Physical Chemical plant when it was first built in 1966. When the current Physical Chemical plant was rebuilt in approximately 1977, the facility was connected to the upgraded plant. See documents at Tab 19.

20. Describe the volume, nature and characteristics of the facility's wastewater discharge into the Sauget wastewater treatment plant.

**The response to this question is submitted in a sealed envelope at Tab 20. Ethyl asserts that the volume, nature and characteristics of its waste water is privileged information and confidential.**

21. Provide copies of all local (e.g., Village of Sauget or Village of Monsanto) environmental permits or licenses ever granted for the facility or any part thereof concerning any portion of the sites, with the exception of Site O in Sauget Area 2.

**Ethyl was unable to locate any such permits or licenses relating to any portion of the Sites.**

22. Provide a copy of any annual documents required to be kept for the facilities in accordance with 40 C.F.R. § 761.180(a).

**See Tab 22.**

23. Provide any information you have generated or gathered on groundwater flow and groundwater quality on or around the facility or on or around any of the Sauget Area sites.

**Information regarding the sampling for dioxin at the facility is contained in the response to question 6 and at Tab 6.**

**Ethyl obtained a copy of a two volume report prepared by Ecology and Environment, Inc. for the Illinois Environmental Protection Agency about the Dead Creek Project Sites, dated May 1988. Since this material is public information, Ethyl assumes that EPA already has the report and has not provided a duplicate in response to this information request. Please inform Ethyl if EPA wants it to submit the report. A copy of the cover pages are contained at Tab 23.**

24. Describe all measures taken by the facility or its consultants which have been taken to characterize, measure, sample or in any way test for the presence of hazardous materials at or around any of the Sauget Area Sites. Provide any documents created from such measures and any results of testing.

**Ethyl has not undertaken to sample or test for hazardous materials at the Sauget Area Sites.**

25. Provide a history of the ownership of the facility.

Construction of the facility began just before the outbreak of World War II. The units were designed for the production of several chemical warfare products. Both the site and the units were the property of the U.S. government but under the operation of Monsanto.

The plant was shut down in late 1944.

Monsanto acquired the plant and converted the units to peacetime products. At the facility, Monsanto made numerous products including lubricant additives.

In late 1969, Edwin Cooper & Company, Ltd. of London (a Burmah Oil subsidiary) purchased Monsanto's petroleum additives business, including ownership of the facility.

In 1975, Edwin Cooper was purchased by the Ethyl Corporation and the division subsequently changed its name to Ethyl Petroleum Additives, Inc. in 1984.

See documents at Tab 25.

26. With the exception of results or reports regarding Site O in Sauget Area 2, provide copies of any sampling results or other technical reports which are responsive to any of these questions and clearly indicate on each document the question(s) to which it is responsive.

Information responsive to this question is contained in the response to question 6 and at Tab 6 and at Tab 23.

27. Provide copies of all documents including deeds, liens, leases, satisfied and unsatisfied mortgages, easements and encumbrances for all real estate as cited in Definition #3 of Attachment 2, including the facility, in which Ethyl Petroleum Additives, Inc. holds a title interest.

Ethyl Petroleum Additives, Inc. has never owned or leased any portion of the Sauget Area Sites.



EXHIBIT B

IN THE MATTER OF:  
SAUGET CERCLA SITES I AND II

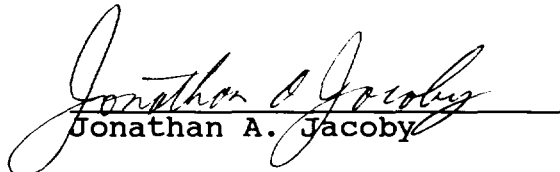
AFFIDAVIT OF JONATHAN A. JACOBY

I, Jonathan A. Jacoby, being first duly sworn, on my oath  
state:


1. I am the Manager of Environmental Safety and Regulatory  
Affairs at Ethyl Petroleum Additives, Inc., 501 Monsanto Avenue,  
Sauget, Illinois.

2. Under my direction, a diligent interviewing process and  
record search was completed to enable Ethyl to respond to EPA's  
May 13, 1997 information request about Sauget Areas I and II.

FURTHER, AFFIANT SAYETH NOT.

  
Jonathan A. Jacoby

STATE OF ILLINOIS     )  
                    Clinton     )  
COUNTY OF ~~ST. CLAIR~~     )     SS

 Subscribed and sworn to and before me this 16<sup>th</sup> day of  
June, 1997.

  
Notary Public

My Commission Expires:

2/29/2000

